REMARKS

The Office Action dated April 18, 2007, has been received and carefully noted. The above amendments and the following remarks are being submitted as a full and complete response thereto.

Claim 1 is being amended to correct a typographical error found therein. All of Claims 1 – 14 are being submitted for re-consideration in light of the comments below. No new matter has been added.

Claims 1, 3, 4, and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 2,677,344 to Annis taken in view of US Patent No. 4,359,311 to Benesh. Claims 2, 12, 13 and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Annis taken in view of Benesh and further in view of US Patent No. 1,172,149 to Kolozsy. Claims 5 - 8 were were rejected under 35 U.S.C. § 103(a) as being unpatentable over Annis taken in view of Benesh and further in view of US Patent No. 5,044,878 to Wilhelm. Claims 9 and 10 were were rejected under 35 U.S.C. § 103(a) as being unpatentable over Annis taken in view of Benesh and further in view of US Patent No. 5,333,996 to Bergstein. Any reapplication of these rejections would be respectfully traversed.

The present invention as claimed in Claim 1 is a wind turbine which comprises certain specific structure. The wind turbine is provided for rotation about a longitudinal axis substantially perpendicular to the direction of fluid flow and comprises three longitudinally extending blades. Each of longitudinally extending blades increases in axial cross-sectional width along the axis. The leading surface of each blade diverts fluid

flow impinging thereon to generate a zone of reduced fluid pressure acting thereon. The trailing surface of each said blade has turbulent fluid flow impinging thereon to generate a zone of increased fluid pressure acting thereon.

The Examiner appears to have misunderstood the claims of the application.

In relation to the rejection to Claims 1, 3 and 4, the primary citation, Annis, discloses a device having four fabric sails. Since the sails are made of fabric, the axial cross-sectional width of the sails (or blades) is constant, being merely the thickness of the fabric. This is to be contrasted with Claim 1 which requires that the axial cross-sectional of width increase along the axis. This is best understood by a consideration of Figs. 2 and 3 which are each horizontal cross-sections and which show that the triangular blade is much thinner at the top than at the bottom. Clearly, this is different from a fabric sail where the thickness is constant and unchanging. The Examiner appears to be confusing axial cross-section with radial cross-section.

Furthermore the second citation, Benesh, clearly has sails or blades fabricated from sheet metal material which is again of constant thickness. Thus the rejection to Claims 1, 3, and 4 should be withdrawn since the references cited clearly do not teach or suggest a major feature of the claims.

Turning now to the rejection of Claim 11, conventional vertical axis wind turbines operate on the Savonius principle which traditionally has two cups or hollow half cylinders facing in opposite directions. The wind blowing into the concave surface of the cups generates a substantial drag force in the same way as the sail of a yacht which is sailing down wind. The wind blowing onto the convex (or leading) surface of the cups generates a

lesser drag and tries to rotate the entire apparatus in the opposite direction. Since the down wind drag is greater than the drag heading into the wind, the Savonius turbine rotates accordingly and the applied torque is a result in the difference in the two drags.

However, the present invention, as defined by claim 11, operates completely differently. The blade trailing surface creates a drag in the conventional method of a sail sailing down wind whilst the leading surface actually generates lift and is accelerated into the wind. This is akin to the action of a yacht's head sail when sailing into the wind. Thus the net torque is not the difference between two drags as is conventionally the case, but is the sum of a lifting force and a drag force.

In Annis, the passage cited by the Examiner (column 3, line 75 to column 4, line 11) explains that wind striking the concave surface of the sail 65 (of Fig. 1) will rotate the mast clockwise as seen in Fig. 1. The wind striking the convex surface of the sail 66 (that is the leading surface of the sail) "will tend to deflect from the same allowing the much greater force or pressure developed within the concave surface of the sail to rotate the mast". This sentence makes it clear that the forces generated by the sails 65 and 66 tend to rotate the mast in opposite directions but that the greater force developed by the sail 65 prevails. This is exactly the opposite of what happens and what is claimed in the present invention. Accordingly, the Examiner's analysis of combining Annis with other citations' is misplaced and fails.

Benesh contains no teaching or suggestion to cure the above deficiency of Annis with respect to Claim 11.

Similarly, the rejection of Claims 2 and 12 – 14 based on Kolozsy is also misconceived since no one of skill in the art would attempt to combine Annis and Kolozsy since the former has a fabric sail and the later has a (presumably) solid blade extremity 23. Thus there is no way for the fabric of the blade of Annis to support the angled extremity or longitudinal extending edge strip of 23 of Kolozsy.

Furthermore, in relation to Kolozsy, the longitudinal extending edge strips 23 are directly connected to a hollow frustoconical hollow member 15 which does not have shaped leading or trailing surfaces. Accordingly, there is no motive to combine Kolozsy with either Annis or Benesh since these both have distinct blades or sails. A person skilled in the art would not attempt such a combination.

Claims 5-8 are rejected by a combination of Annis and Benesh and Wilhelm. Although Wilhelm discloses multiple turbines, all the blades are formed from sheet metal material and therefore have a substantially constant axial cross-sectional width. That is, Wilhelm does not cure the basic deficiency of the primary combination.

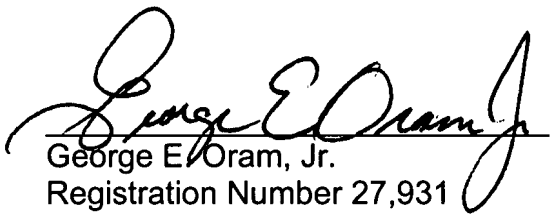
Finally, Claims 9 and 10 are rejected under a combination of Annis and Benesh together with Bergstein. However, again the blades are formed from sheet metal of substantially constant cross-sectional thickness and the reference does not cure the basic deficiency of the primary combination.

Accordingly, clear differences exist between the invention as claimed and the prior art relied upon by the Examiner. It is submitted that these differences are more than sufficient that the present invention would not have been obvious in view of that art.

Applicant respectfully submits that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

In the event that this paper is not being timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account Number 01-2300, referencing Docket Number 026328-00007.

Respectfully submitted,



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